

---

# Nucleus-Agro Enterprises Papua New Guinea

## Contributors

- Ruth Pune
- Frank Fichera
- Yat Paol
- Lester Seri
- Damien Ase
- Virginia Simpson
- Simon Hart
- Jessica McLean

by  
Lee Tan

Centre for  
Environmental  
Law and  
Environment,  
(CELCOR),  
Friends of the  
Earth PNG,  
Australian  
Conservation  
Foundation,  
Friends of Earth  
Australia

# Outline

## I. Introduction

1. Locating the Project in Terms of its Sectoral Context
  - *Agriculture Development and Poverty Reduction*
  - Agriculture Privatisation or Poverty Reduction
  - ADB in the PNG Agriculture Sector
2. Locating the Project in Terms of its Country-specific Context
  - *Natural Resources in PNG*
  - Effectiveness of ADB Loans in PNG

## II. Project Description

1. Project Details, Implementation and Rationale
  - *Loan Summary*
  - Smallholder Nucleus Estates
  - Project Implementation
  - Original Project Time Frame
  - Selection of First Batch of Sub-project Proposals
  - Selection of First Batch of Pilot Project
  - ADB's Rationale
2. Concerns
  - *ADB Projects and Poverty Reduction*

- *Failure of the Export-Driven Development Strategy*
  - Smallholders Agriculture Scheme and Poverty
  - Undelivered Promises of Oil Palm Smallholder Scheme
  - Undermining of Customary Land Tenure System
  - Social Implications
  - Erosion of Cultures, Restructuring Community, Undermining Securities
3. Activities taken by Affected People and NGOs

## III. Project Monitoring

1. Review of Project Against ADB Environmental Provisions
  - *ADB Environmental Guidelines*
  - Issues Related to Application of ADB Environmental Guidelines
  - *Project Environmental Assessment Procedures*
2. Other Environmental Issues Identified

## IV. Summary

- *The Way Forward*

## Introduction

In 2000, the Government of PNG requested assistance from the Asian Development Bank (ADB) for the preparation of an agro-industry development project to generate income-earning opportunities for the rural population. A project preparatory technical assistance (PPTA) was approved in November 2000.<sup>1</sup> Consultants were fielded in January 2001, and the final report was presented to ADB and the Government in May 2001. The Nucleus Agro-Enterprises project (NE) was approved for lending by the ADB to the Independent State of Papua New Guinea on 18<sup>th</sup> December 2001

<sup>1</sup> TA 3545-PNG: *Agro-Industry Development* for \$500,000, approved on 14 November 2000.

## Locating the Project in Terms of its Sectoral Context

### Agriculture Development And Poverty Reduction

**A**gricultural production in PNG is the mainspring of growth and the principal tool for reducing poverty in rural areas."

ADB News Release on the PNG Nucleus-Agro Enterprises Project, 20 December 2001

ADB has long held the view that large agro-industry is more 'productive' than subsistence farming and poor countries should focus on producing cash crops which can in-

crease their export earnings to improve their economy. This project is aimed at developing wider commercially based smallholder and agro-industry in rural areas of Papua New Guinea (PNG).

It is premised on the private and the public sectors' strong interest in the concept of using nucleus enterprises (or small holders scheme) as the focus for wider agriculture development. According to the ADB, nucleus enterprises (NE) will provide market outlets, technical support, planting materials, and social services that cannot be provided by

either the public sector or the smallholders themselves. These enterprises will in turn provide much-needed employment to subsistence farmers, shifting them away from the informal subsistence economy. This, they claim will improve incomes and standards of living in rural areas throughout PNG.

The *Smallholders Nucleus Estates* scheme normally consists of an enterprise or trading company of a commodity with processing and marketing facilities surrounded by smallholders or out-growers of the same commodity. The surrounding small holders supply their produce to the company and hence provide an accessible catchment for the parent company. These smallholders are usually growers of cash crops such as oil palm, coffee, rubber, cocoa and other high-demand and predominantly export-oriented food items including specialty seafood and meat. In reality, NEs use smallholder or out-growers as contract suppliers to secure supplies while making them partners in risk-sharing and the cost of production. NEs are dependent on continuing access to profitable and expanding markets. The parent company has a monopoly which allows it to determine and facilitate the growing of its crop of choice and set prices and conditions.

Many of the ADB-funded large-scale monoculture cash crops projects have been controversial as they were often socially and environmentally damaging. ADB has received much criticism for using poverty reduction as a front to subsidise and support the private sector.

### **Agriculture Privatisation or Poverty Reduction**

There are many problems associated with this kind of agriculture scheme. Although the annual interest rates for the loan are relatively low, it will induce further borrowing needs past the pilot and feasibility studies phase. The long loan schedule (32 years) and the condition to repay the loan in US dollars will increase the debt burden of PNG thereby exacerbating poverty. Currently PNG's debt level is estimated to be 80% of its GDP<sup>1</sup>. This project with a loan of USD\$5.9 millions will incur an estimated total repayment of USD\$7.6 millions (inclusive of accumulated interest amounts to 30% of the total repayments).

It is also important to note that the PNG Kina value has plummeted by a staggering 360 percent against the US dollar over the 28-year period from 1975 to 2003 (from PGK ).7362 to PGK 3.5026 to a USD\$!).

Furthermore, the conversion to cash crops often results in irreversible environmental damage. This is particularly significant for PNG since no less than 65% of its land is still forested and is ecologically intact. And over 85% of its 5 million population are dependent on a healthy and intact natural environment for survival. More in-depth discussion on these issues is found in the latter sections of this report.

It is therefore not surprising that ADB has refused to acknowledge that this project is essentially encouraging a range of commercial enterprises mostly involved in developing big, monoculture cash crops including the controversial oil palm. ADB has to date chosen its words very carefully using cryptic language like “nucleus smallholder” and positive terms like “partnership”. Senior project staff even went so far as to suggest that through this scheme ADB is using the “market to bring about economic development and positive social change, while at the same time protecting and improving the environment...”<sup>2</sup>.

However, ADB’s rhetoric has not helped to disguise the fact that NE is just another publicly funded privatisation scheme. Despite its covert, indirect language the ADB is essentially using public money to create facilities that will be privately

owned. This scheme will transform the surrounding farming activities of traditional communities into small cash crop growing. It is evident from the experience of similar schemes that this project is set up to convert subsistence farmers into small growers (or holders in project speak) of cash crops<sup>3</sup>.

Senior ADB staff have denied that this would result in large-scale expansion of oil palm<sup>4</sup>. However, the Government of PNG (GOPNG) continues to make public announcements that oil palm expansion will be facilitated. Not long after the approval of this loan, a newspaper article cited GOPNG’s oil palm expansion plan and earmarked nine areas to be studied<sup>5</sup> under the ADB loan scheme. Given GOPNG’s notorious track record in non-adherence to loan conditions, it will be difficult for ADB to resist the political pressure not to allocate funds for oil palm projects. Previously ADB has directly funded an oil palm project in West New Britain,<sup>6</sup>

This project will link small holders into a privately owned and often foreign-controlled monopoly which will determine the collecting, processing, marketing and hence pricing of the specific cash crop. The nucleus-agro enterprises project is in fact an opportunity for large foreign investors to access the resource base of PNG.

- 1 Country Assistance Program Evaluation for Papua New Guinea, October 2003
- 2 Ponzi, Daniele (2002) Letter to the Australian Conservation Foundation, 5 August [Daniele was an Environmental Economist and the Project Team Leader for the Nucleus Agro-Enterprises project with the ADB]
- 3 Dr Tim Anderson [Political Economist, University of Sydney], "A Grand Deceit: The World Bank's claims of 'good governance' in Papua New Guinea", August 2003
- 4 E-mail correspondence August 2002 & face-to-face meeting with senior Project Staff, June 2003
- 5 "Oil Palm, the best alternative" by Ekonia Peni The Independent newspaper, July 2002
- 6 Loans 785/784-PNG(SF), *West New Britain Smallholder Development Project*, for \$29.9 million, approved on 14 August 1986.

### ADB in the PNG Agriculture Sector

#### Breakdown of Cumulative ADB lending to Papua New Guinea as of 31 December 2002.

Sector	Number	Amount (US\$ million)	% <sup>a</sup>
Transport and Communications	12	253.9	29.7
Social Infrastructure	16	215.4	25.2
Agriculture and Natural Resources	13	190.4	22.3
Others	295.8	11.2	
Energy	5	43.0	5.0
Finance	4	32.1	3.8
Multi-sector	3	16.0	1.9
Industry and Non-fuel Minerals	1	8.4	1.0
<b>TOTAL</b>	<b>56</b>	<b>855</b>	<b>100.0</b>

<sup>a</sup>Figures may not add due to rounding.

Lending to the productive sectors (agriculture and industry) expanded from 10% in the 1970s to 45% in the 1980s, but contracted again to 12% in the 1990s. As shown in the above table, a total of USD\$190.4 million in loans or 22.3% of total loan to PNG as at December 2002 was provided for the agriculture and related sector since PNG's independence in 1975. This sector is significant in terms of the relative size of loans disbursed (and hence debt accumulated). In the current ADB Country Strategy Paper 2003-2005, agricultural and rural development has been identified as critical to reducing poverty.

In the country strategy, this project is hailed as innovative agro-industry intervention to reduce poverty sustainably through partnerships with the private sector. It will build on the results of the ongoing TA loan for feasibility studies in agriculture. Based on the results of a TA to formulate an agriculture and rural development policy, a proposed rural development project will build on the lessons from the ongoing smallholder support services pilot project, tying in with at-

tempts to reduce other constraints on rural sector activities.

According to ADB's own country evaluation in 2003, a total of 52 project/program preparatory technical assistance (PPTA) grants were approved since 1971, with the largest number of them going to the agriculture sector (28% of all PPTA grants). However, the number of PPTA grants did not correspond to the number of loans approved in the same sectors. In the agriculture sector especially 21 PPTA grants were approved, but there were only 9 loans (2 PPTAs are currently ongoing) due to the non-viability of most of the TA projects selected. This disappointing ratio is a result of inadequate project identification, planning, and design capacities and frequent staff changes within the responsible ministry, which were disruptive to continuing support for project concepts and efforts to see projects through all stages, from identification to approval and implementation.<sup>1</sup>

---

<sup>1</sup> Country Assistance Program Evaluation for Papua New Guinea, October 2003

# Locating the Project in Terms of its Situation Specific to the Country

## Natural Resources in PNG

Papua New Guinea is a country blessed with some of the most diverse and rich eco-systems in the world. Three quarters of PNG is still covered with lush primary tropical forests. A large section of PNG's seas are bounded by the *coral triangle* which houses the world's richest marine and coral biodiversity. With only 1% of the world's land area, PNG contains an estimated 7.5% of the world's total biodiversity.

Knowledge of PNG's biodiversity leaves a lot to be desired and the gaps in existing biological data are many. The existing knowledge suggests that PNG is home to:

- 15000-20000 species of vascular plants (ferns and flowering plants).
- At least 700 reef building coral species.
- Well over 3000 fish species.
- More than 197 frog species, most of which are endemic or found only in PNG,
- 195 lizard species and 98 snake species. 60% of all reptile species are endemic.
- 762 bird species, 53% of which are endemic.
- 187 indigenous terrestrial mammal species and 24 marine mammal species.

Socially, PNG is renowned for its socio-cultural diversity, with over 8,000 autonomous tribes and some 750 languages. Customary land tenure system is recognised by law. Papua New Guineans inherit land, matrilineally or patrilineally, depending on the local custom and practice. And they have cared for the lands, seas, rivers and forests of the entire country themselves for at least 30,000 years. In return, the natural environment has nurtured the people, providing them with food, medicines, building materials and a spiritual focus.

PNG is known as the Last Frontier on Earth. It is a fusion of vibrant colors and diverse life, ranging from idyllic, paradise islands, lush coastal jungles to high mist covered mountain peaks bisected by crystal clear waterfalls. This rich diverse land is mirrored under the sea with reefs sporting a myriad of marine lives unrivalled on the planet. It is the larg-

est and most populous country in the Pacific with a land area of 462,000 km<sup>2</sup> and a population of over 5 million. Much of PNG is classified as a “major tropical wilderness area”, as it contains more than 65 percent of its original pristine vegetation, and its human population is less than five people per square kilometre. The only other areas with such characteristics are parts of the Amazon rainforest and the Congo Basin.

Most people in PNG are still linked to their communal land, indigenous belief systems, spirituality and customary law. There are strong, common social principles that form the basis of contemporary island cultures: service to chief, family or clan; strong commitment to customary land ownership by descent groups; reciprocal responsibility between leaders and commoners.

For the local people, land and the natural environment is the centre of their life. It is a source of livelihood through subsistence activities, a source of power and status through ownership, and above all a source of security and identity.<sup>a</sup> A healthy environment is their only asset, and a precious heritage which they can pass on to the future generations. PNG’s land tenure system is one of the most unique in the world. Over 95 percent of lands are customary owned and this

is enshrined in PNG’s Constitution. These communities wield considerable discretionary power as regards land use allocation and access.

The PNG Constitution promises human dignity, self-reliance, ecological sustainability and cultural integrity. As such, projects such as oil palm and other agro enterprises which involved large tracts of land transfer and/or conversion will have many implications on the customary land tenure system and hence the PNG Constitution.

#### Effectiveness of ADB Loans in PNG

“We are moving away from the ‘nanny government’ that provides everything, and governments are accepting the role of encouraging the private sector to play a bigger role in economic growth,”

**Peter King, ADB Director (Area B),  
Pacific Operations Division. 2003**

Between 1971 and 2002, PNG borrowed US\$855 million, through 56 loans, from ADB. Of these US\$392 million were from the Asian Development Fund (ADF)<sup>1</sup> and US\$463 million were from ordinary capital resources (OCR)<sup>2</sup>. These loans financed a total of 45 projects, of which 33 are completed and 12 are ongoing. The current loan portfolio consists of thirteen loans, of which one is not yet

effective. After a slight improvement in 2000, portfolio performance deteriorated again in 2001, with inadequate implementation as the primary problem. Many factors underlie the inadequate performance. Bureaucratic delays in starting projects, notwithstanding extensive preparatory actions, have been especially problematic. Delays in hiring consultants and in procurement, due in large part to weak legal capacity, are contributing factors. Slow release of counterpart funds have also delayed projects considerably.<sup>3</sup>

After a review in 2000, ADB decided not to graduate PNG from Category B2 (OCR with limited amounts of ADF) to Category C (OCR only)<sup>4</sup>, as had been decided in 1998. Therefore, PNG remains in Category B2 with access to some Asian Development Fund (ADF) loans and a cost-sharing limit of 60%. The situation was to be reviewed during 2002. Since the 2000 review, per capita incomes continued to decline, which would argue for considering a move to category B1. In 2002, the World Bank decided to allow PNG access to International Development Agency (IDA)<sup>5</sup> resources, after restricting access to only ordinary International Bank for Reconstruction and Development (IBRD) resources since 1982.

The dual economic structure of a small formal sector (centred around logging and mining) and a broad-

based informal sector (subsistence activities) is viewed by the ADB as a major development challenge for PNG. This dual economy is considered undesirable and is used as an indicator of economic non-performance. Bartering and exchange of goods for cash is vibrant throughout PNG but this trade is not costed and is therefore not included in the GDP. Most PNGeans do not consider themselves poor and they do have an income and jobs through their subsistence activities.

So far, no attempt has been taken to measure the values and the contribution of the so-called informal sector. It is no wonder that the World Bank estimated that about 40% of PNG population live in poverty with an income of less than USD\$1 a day.

The disappointing human development index for PNG of 0.314 reflects low life expectancy, poor adult literacy, and low enrollment at all levels of education. Maternal, infant, and child health are very poor and worsening in the most disadvantaged provinces. Access to education and health services is very limited, especially for the rural population. Gender inequalities are significant, with women's life expectancy, income, and educational achievements universally lower than men's.<sup>6</sup> Yet for the last 15 years assistance has been focusing on driving economic growth instead of addressing these urgent so-

cial needs. US\$584 million or 69% of total lending was provided to sectors related to promoting economic growth and addressing questions concerning the dual economy<sup>7</sup>.

During this period, ADB's assistance program has operated on the premise that promoting economic growth would reduce poverty through job creation. ADB's own evaluation report concluded that "due to the fragmented nature of interventions, only isolated outcomes were produced and often they were not sustained, because funding for recurrent operations was not secured. No significant improvements to sector performance were attained. Contributions to the overall goal of promoting economic growth, particularly in rural areas, were overshadowed by external factors, such as international commodities prices, the Asian financial crisis, and periodic droughts. Poverty reduction outcomes, embedded in the goal to promote broad-based employment-generating growth, were isolated and fragmented, although poor economic performance and the deteriorating law and order situation are resulting in rising multifaceted poverty trends after improvements were achieved in the first 15 years of independence."

---

a "Land, Labour and Independent Development", Chapter 5, The Cambridge History of the Pacific Islanders, Cambridge University Press, Cambridge, 1995

1 ADF loans are made at concessional terms, which include grace periods of 8 to 10 years, repayment periods of up to 40 years, and an interest rate of 1% during the grace period and 1.5% afterward. This is considered as a 'soft' loan to assist countries classified as 'poor'.

2 OCR loans were made at commercial interest rates with terms between 15 and 25 years and grace periods between 3 and 6 years. OCR loans have been changed to lending based on London interbank offered rates, since July 2001. OCR loans are awarded to countries

3 Asian Development Bank Papua New Guinea Country Strategy and Program Update (2003 – 2005), July 2002

4 Group A includes countries with very low per capita GNP and limited debt-repayment capacity; Group B includes lower middle-income countries and one low-income country,<sup>2</sup> at intermediate levels of economic development and with increasing capacity to service their debt; and Group C includes upper middle-income and high-income countries with relatively high debt-repayment capacity. Group A developing members countries (DMCs) are fully eligible for Asian Development Fund (ADF) financing, Group B DMCs are eligible for limited amounts in particular circumstances, and Group C DMCs are not eligible. The actual allocation of ADF resources, however, depends on available ADF resources and the country's economic circumstances

5 IDA loans attract much lower interest rates as compared to the IBRD loans which are calculated based on commercial rates. IDA is the World Bank's group equivalent to ADF and the IBRD loans are equivalent to ADB's loans from Ordinary Capital Resources.

6 Asian Development Bank Papua New Guinea Country Strategy and Program Update (2003 – 2005), July 2002

7 Country Assistance Program Evaluation for Papua New Guinea, October 2003

## Project Description

# Project Details, Implementation & Rationale

### Loan Summary - Nucleus Agro-Enterprises Loan No 1889 – PNG (SDR)

**T**otal Project costs \$US 7.9 million consisting of :

- ADB loan \$US 5.9 million loan : Special Drawing Rights 4,616,000 from its Special Funds resources
- PNG government \$US 1.0 million
- Private sector, NGOs \$US 0.5 million
- Repayment period of 32 years with 8 year grace period. 1%pa interest in grace period, 1.5%pa thereafter.
- Loan is to the PNG government (GOPNG).
- Executing agency is the Department of National Planning and Monitoring.
- Project implementation by a

Technical Assistance Screening and Management Unit (TASMU) composed of domestic and international consultants.

- Money will go to consultants to conduct feasibility studies, and to private sector and/or NGOs to conduct pilot projects

Loan consisted of two major components :

- (i) feasibility studies for nucleus enterprise-based development projects in agriculture and agro-processing which includes (a) initial project identification and screening, (b) subproject feasibility studies, and
- (ii) small-scale pilot project activities in and around potential nucleus enterprises.

According to the executing agent TASMU, the TA loan provides an opportunity for the adoption of a coordinated approach to the establishment of a mechanism for screening, policy analysis and

awareness raising. It is considered an enabling framework for the conduct of detailed technical feasibility studies, including assessments of marketing opportunities, social benefits and environmental impacts.<sup>1</sup>

### **Smallholders Nucleus Estates in PNG**

*Smallholders Nucleus Estates* in PNG are organized into village-based small estates or farms and leaseholders. Village-based estates are operated by landowners in their own customary lands. Leaseholders lease land from other landowners for the plantings. The company and the associated support services, usually funded through loans provided by the international financial institutions (IFIs) including the ADB, provide seedlings, expertise, tools, fertilizers, etc, depending on the commodity involved, which the growers will repay through the 'selling' of their produce back to the same company.

Under the proposed TA loan, financing will be provided to help prepare a framework for nucleus enterprise development, develop a pipeline of suitable subprojects, and undertake piloting of selected project activities. In the long term, it is anticipated that some of the pilot projects will provide a smallholder development concept that can be packaged into a series of subproject

proposals for financing by the Asian Development Bank (ADB) or other financing agencies.

### **Project Implementation**

The Nucleus Agro-Enterprises Project (NAEP) comprises three activities:

**1. Screening of potential projects** identified by the national and provincial governments and private sector interests. The initial screening would ascertain potentially viable proposals that would then be subject to a detailed FS.

**2. Funding for detailed Sub-project Feasibility Studies (SFSS)** to assess the economic and financial viability of project proposals and their impact on social and environmental objectives;

**3. Funding for small-scale pilot projects** to test particular aspects of project proposals. Subject to certain conditions this component of the project would allow a NE to test a proposed technology or institutional arrangement that is judged important for the success of the project proposal.

### **Original Project Time Frame**

- Recruitment of consultants for feasibility studies by the end of September 2002

- Begin of feasibility studies and pilot projects October/November 2002

- Project completion by April 2004

In reality, the implementing agent, TASMU, was only set up towards the end of 2003. The initial round of sub-projects was identified during the first quarter of 2004. This stage represented the start of implementation of activities. Selection of potential sub-projects was followed by a 2-day Rapid Field Appraisal (RFA) within each site to enable the TASMU team to make a more detailed assessment of its potential for a detailed SFS.

The implementation of the Project can be organised into four activities. Within each activity there will be a series of tasks that are recurring during continuing cycles within the activity:

**Activity 1:** Sub-project Identification and Screening - This activity commenced in late January 2004 and will continue for the ensuing 23 months during which time a total of up to 41 sub-projects are targeted for screening of which at least 20 should proceed to Activity 2. There are a total of 18 tasks identified under this activity, four of which become recurring tasks as each batch of sub-projects is identified and screened. Because of the staggering of the tasks, this Activity will overlap with Activity 2 which is concerned with

the actual conduct of the SFSs.

Prior to the conduct of formal briefings at the provincial level, an initial set of Screening Criteria is being developed that will provide the basis for the selection of the initial short-listing of proposals. These Screening Criteria are being applied to the project proposals that make up the Referral List that the TASMU has already compiled<sup>1</sup>. A total of 11 proposals have been identified in this way to provide the first batch to be considered as potential sub-projects. The purpose of these screening criteria is to identify proposals that describe proposed projects that are sound and are likely to be viable. These Screening Criteria have been used to review the existing short listed projects and will then be extended to the remaining proposals that are on the Referral List as well as new proposals that are submitted to the TASMU.

**Activity 2:** Conduct of Sub-project Feasibility Studies - This stage entails the recruitment of the consultants, followed by the supervision of the conduct of the SFSs, conducting Fact Finding Missions to the field as required upon completion of the SFSs and finally the preparation of investment packages for each of the NEs that have been studied. This stage was scheduled to commence by the end of April 2004 and extend

for a total of 18 months finishing approximately two months prior to the completion of the Project.

**Fact Finding Mission** - this is included as a safeguard for any SFSs that give rise to contentious issues especially in regard to social impact and environmental impacts. The responsibility for these Missions will rest largely with the Social Impact Assessment Specialist and the Environmental Specialist. In the case of such sub-projects these Missions will provide an opportunity for the TASMU to gather additional information to ensure that a sound investment package can be prepared.

**Activity 3:** Identification and Supervision of Pilot Projects - Alongside the facilitation of the SFSs the TASMU is also required to identify and finance small-scale project activities that are to be undertaken by (Nucleus Enterprises) NEs wishing to test a proposed technology or a set of institutional arrangements.

The identification of the pilot projects will commence at the same time as the sub-projects. The procedures for the pilot projects will be somewhat simpler and they will be implemented over a 19-month period through a series of up to six cycles with at least two or three pilot projects being managed during each cycle

**Activity 4:** Consolidation - The compilation of documentation of the experience of the TA Loan. The team will conduct a series of field visits to selected NEs to conduct consultations with representatives of all stakeholders. The consultations will take place in the sub-project areas where there has been progress with implementation of the sub-projects and the formation of NEs. In addition, consultations will take place in the areas where pilot projects have been supported and these may well provide a richer source of learning from the implementation experience.

A report documenting the experience of both the sub-projects and the pilot projects will be compiled to supplement the Mid Term Report that will already have been produced. The overall findings will be presented in the form of a consultative workshop for Government and private sector representatives with a view to identifying future courses of action for the concept of NE development and most effective modes of Government support for these ventures.

---

1 Appendix 8 and 9 associated with the January Inception report presented the format for the Preliminary Project Proposal Assessment and the Scoring procedure. At the time of this report being written, these appendices were not made available for this monitoring exercise.

### **Selection of First Batch of Sub-project Proposals**

The TASMU has assembled a Referral List of over 170 project proposals although not all of these relate to the formation of NEs.

The TASMU has made a preliminary short listing of 41 project proposals from all of those on the Referral List and the National Experts have been engaged in some initial work on assessing these proposals. The projects that have already been subject to initial study and preliminary field visits include the following

- 1. Commercial Cultivation of Cassava in PNG** - A large Korean brewery company wishes to invest US\$26 million into developing a cassava growing and ethanol processing plant in the country.
- 2. Cocoa Rehabilitation & Redevelopment in Bougainville** - About four large plantations have been identified in the Province by a TASMU fielded team. The four plantations are strategically located within the cocoa belt of the province
- 3. Kosher Beef Proposal for Central Province** - To develop all cattle ranches in Central province

to cater for the kosher beef market in Israel. An Israeli investor has expressed interest in investing in the cattle industry in PNG, particularly in Central Province, using the existing abandoned cattle ranches.

- 4. Kubor Coffee Limited.** The proponent is rehabilitating run-down plantations in the remote Dei district of Western Highlands Province.
- 5. Arona Valley Coffee Mill** - This project might be considered as a pilot project as it attempts to test institutional arrangements where (Copra Industry Corporation) CIC provides support at the level of a NE to develop a plantation rehabilitation support services package for the outgrowers using the factory.
- 6. Piggery Development in Central Province.** The project is proposed as a way of imparting skills to farmers in and around Ilimo, most of whom were displaced when the Ilimo Poultry Project collapsed.
- 7. Pyrethrum Production and Processing in Enga.** This project has already been established with Government support in 2003. It needs additional assistance to get nurseries established, pyrethrum splits distributed and larger areas planted with pyrethrum. The indus-

try has been identified by the Porgera Joint Venture<sup>1</sup> Company for assistance in its Mine Closure Plan.

**8. Gavien Rubber Scheme in East Sepik.** It is expected that Galley Reach Holdings, a subsidiary of the Belgium-based SIPEF Group will take on this project as part of the overall expansion of its rubber business in PNG.

The company owns and manages Galley Reach Plantations in Central Province, and buys rubber from all rubber estates, including Gavien, for its factory located in Central Province. TASMU can work closely with SIPEF to expand its portfolio in this industry.

**9. Pacific Spices Ltd.** The company is pioneering the intercropping concept where minor crops are inter-cropped among cocoa trees at its plantation at Vunakanau, East New Britain. The project is considered a pilot project that should be assisted.

These and other project proposals are on a priority list. Some have been subjected to a Preliminary Project Proposal Assessment (PPPA) by the TA team. This assessment is set up to determine the extent to which they comply with initial Screening Criteria that have been developed<sup>2</sup>.

This process has enabled the number of project proposals, which are currently on the priority list, to be further reduced.

#### Selection of First Batch of Pilot Project

From the first batch of (Rapid Rural Appraisal) RRA, the following pilot projects were recommended at the end of March 2004. Pacific Spices to test the production of essential oils from a range of spice crops and to assess their export market potential.

1. Mosa Holdings to establish the poultry hatchery to produce day-old chicks for sale to the poultry raisers within the oil palm blocks.
2. Kabwum district to expand the capacity for wet processing of coffee and to assist TDC and Gomo Trading to expand the buying operations of both cherry and parchment for shipment to Lae or, in the event that the Wasu coffee mill should be constructed, to process the green bean locally.
3. Akamupa Plantation to complete the rehabilitation of the plantation, expand the capacity for wet processing of coffee, expand the buying operations of cherry for processing and shipment to Kainantu or Goroka, rehabilitate the road access to the plantation

and provide extension services to the smallholders in the area.

The conduct of the sub-project feasibility studies (SFSs), as well as the pilot projects, will be staggered over the remaining 23-month pe-

riod. A total of 20 sub-projects are targeted to be completed along with 12 pilot projects.

1 PJV operates the controversial Porgera copper and gold mine which has been dumping mine wastes directly into the river.

**Table 1**  
Summary of Project Proposals on Referral List and Short Listed

Commodity	No. of proposals		Commodity	No. of proposals	
	Referral List	Short Listing		Referral List	Short Listing
Agro-forestry	1		Infrastructure	7	
Apiculture	1	1	Livestock (General)	6	
Beef Cattle	12		Oil Palm	17	2
Banana	2	1	Peanuts	1	
Cardamom	3		Pigs	5	1
Cassava	3	1	Pigs/Poultry	2	
Cocoa	6		Poultry	19	1
Cocoa/Coconuts	7	2	Potatoes	2	
Coffee	36	7	Pyrethrum	1	1
Dairy	1		Rural Development	2	
Fish-Aquaculture	4		Rice	4	
Fish-Markiculture	8	2	Rubber	8	3
Feed Grains	1		Sheep	2	
Food Security	1		Spices	1	1
Forestry	3	1	Tea	1	1
Fruit	5		Vegetables	2	1
Herbal Medicine	1		Vanilla	2	
<b>Total Number of Proposal in Referral List</b>				<b>177</b>	
<b>Total Number of Proposals Short Listed</b>					<b>26</b>

### ADB's Rationale

According to the ADB, the TA loan will provide the Government and the private sector with the opportunity to test new modalities in development financing that are intended to bring out the combined benefits of solid private sector entities (nucleus enterprises), small private sector beneficiaries (smallholders and outgrowers), and the public sector (through infrastructure provision) working together to stimulate sustainable economic growth in the previously neglected rural areas of the country. This rationale is based on the following assumptions:

- Most effective means of poverty reduction is through broad-based economic growth led by the private sector.
- Agricultural development in PNG does not attract financing from the

private sector because it is too risky

- Commercial agricultural production by smallholders (i.e. the rural poor) is constrained because expansion of the area of existing crops or agribusiness or development of new crops or agribusiness is restricted by lack of markets, limited access to credit, land ownership uncertainties and lack of adequate infrastructure. Therefore, development efforts should be focused around a nucleus commercial enterprise (NE) that can then provide a market for smallholder crops, improved technology and infrastructure support. This will result in smallholder agricultural development.

The best example of NE in PNG is oil palm production. Oil palm development in the country has been through nucleus estate production supplemented by smallholders who sell their produce directly to the estate for processing.

## Diagram 1: Depiction of Generic Projects that will comprise the NEs

**A** plantation operation and trading company with processing and marketing facilities expanding operations by responding to requests from involved smallholders by providing management inputs to existing and defined smallholder lands.

Existing private enterprise will establish a subsidiary to purchase raw material from smallholders and village growers on a guarantee basis and in return offer essential field inputs at cost plus, and basic field management advice.

Smallholder catchment is widened by rejuvenating and developing former expatriate plantations or other alienated (state) lands at the request of the owners, to provide blocks for individual families or independent landowner groups.

Subleasing to traditional owners the fully expanded production area and relying on traditional owner cohesion.

### Support for new ventures

The existing entity undertakes new development into a similar or new crop with a substantial traditional landowner component.

### Technical Assistance

Industry corporations strengthening their capacity to respond to requests for hands on crop rehabilitation and financial planning.

# Concerns

## ADB Projects and Poverty Reduction

**O**f utmost concern is the assumed poverty reduction to be achieved by NE scheme. According to ADB's own evaluation of its PNG program, there is as yet no evidence that direct assistance to smallholders and the establishment of nucleus estates actually lead to reduction in poverty. While some farmers managed to increase household incomes through this kind of scheme, their incomes continue to be vulnerable to commodity price fluctuations.

On the other hand population increases through settlements (often a result of this kind of scheme) added to pressure on land resources, which communities feel contribute to divisions and disputes between and within communities and immediately affect wellbeing and poverty levels. Ironically, access to land was considered a key component to resolving poverty in this situation.<sup>1</sup>

ADB's evaluation also alerted that over the last 15 years, contributions to the overall goal of promoting economic growth, particularly in rural areas, were overshadowed by external factors, such as international commodities prices, the Asian financial crisis, and periodic droughts.

Poverty reduction outcomes, embedded in the goal to promote broad-based employment-generating growth, were isolated and fragmented. At the same time poor economic performance and the deteriorating law and order situation are resulting in rising multifaceted poverty trends after improvements were achieved in the first 15 years of independence.

The evaluation found that in the agriculture sector, there was "no evidence of overall improvements in productivity or production, investment, or land utilization. In fact, there have been disinvestments and loss of jobs on coffee, cocoa, and coconut estates and downstream processing." Similarly, assistance to smallholders growing oil palm (in West New Britain) and cocoa (in East New Britain) reportedly had positive impacts on individual smallholders. However, trend data on yields and harvests were not available to quantify the extent to which these projects contributed to agricultural output in these two tree crops. Household survey and key informant interviews indicated that productivity depended on commodity prices (incentives for harvesting) and law and order (opportunity to reach markets or traders), both of which determine the returns that a smallholder can expect.

The evaluation report also revealed that earlier efforts to support smallholder development in East Sepik and Cape Rodney had not shown satisfactory or sustained results. These smallholder schemes had suffered from designs that had not taken local conditions and preferences of target farmers into account, thus making wrong choices about production technologies and wrong estimates about the potential to attract new settlers. Both projects were rated unsuccessful.

---

1 Country Assistance Program Evaluation for Papua New Guinea, October 2003

### **Failure of the Export-Driven Development Strategy**

Rather than respect and build on PNG's wise constitutional principles of culturally sensitive and ecologically sustainable development, international financial institutions including the ADB and major bilateral donors such as AusAID have demanded an export-driven approach to development.

A report by a Sydney University academic, Dr Tim Anderson showed that this has been a spectacular failure in PNG<sup>1</sup>. According to Dr Anderson's research PNG has had phenomenal sustained 'success' as a resource exporter; but this has not helped most PNG people. Between

1965 and 1980, PNG's average annual export growth rate was a massive 12.8%, while imports only grew at an average 5.6% (World Bank 1988). Export growth fell in the 1980s, but throughout the 1980s and 1990s exports remained at very high levels, consistently well above 40% of GDP.

There are few countries in the world (with the exception of some oil exporters and other poor countries under Structural Adjustment Programs) with this level of export performance. In conventional terms, this should have been a world class *success story* of export oriented development - but it was not. The following are some of the reasons why :

- A rampant drive for exports has overwhelmed procedures supposed to protect communities and their environments. This is not simply the fault of deeply corrupt PNG Government. The ADB's, the World Bank's and the Australian Government's over-arching demands have been for an export driven industry, making use of PNG's rich resources. They have succeeded in this aim, but they have failed the people of PNG.

- From the 1970s-1990s, when PNG had great export driven 'success', dependence on imported basic food grains (mainly rice) increased, and average energy consumption fell, just as energy exports were ris-

ing. Cereal imports between 1980 and 1993 rose from 150 to over 220 thousand tonnes (World Bank 1995). The World Bank seems to have no problem with food import dependence. This is a serious problem, especially for a resource-rich but cash-poor country.

- The average annual growth rate of energy production (mainly oil) in PNG, from the 1970s to the 1990s, grew from a strong 12% to a phenomenal 20%; growth in energy *consumption* contracted, from 6.7% to 2.4% (World Bank 1995). In other words, as oil exports were *growing* strongly, ordinary peoples' progressive access to energy *contracted*. Exports do not equal social welfare.

- Local communities have not benefited from large mines and commercial logging. A survey in 2002 of the 33 villages between the Ok Tedi mine and the port at Kiunga, in Western Province (the centre of current logging and mining operations), showed that less than 1% of people had electricity, only 12% had some form of secondary education, and 96% had no source of money income (*Tok Tedi* 2002: 10, Newsletter of the Ok Tedi Mining Ltd.).

- The World Bank's own internal audit admits that "the growth of the oil and gas industry has not led to sustained economic benefits to [PNG]"

(World Bank Group Operations Evaluation Department 2003).

Mining and logging operations have lifted PNG's GDP per capita, boosting exports and creating the illusion of a higher income society; but these same industries have in fact undermined community welfare, in most cases. No PNG local community enjoys any lasting benefit from large scale commercial logging or mining operations. On the other hand, many suffer lasting damage.

- The drive to facilitate large-scale logging resulted in more than half the accessible rainforest of PNG being logged, mostly illegally (as indicated by the World Bank funded Government Reviews) devastating the country's natural heritage, dispossessing communities and adding next to nothing to current living standards.

Large-scale agriculture or monoculture cash crop projects have merely turned subsistence farmers to cash crop growers whose incomes now fluctuate according to world commodity prices while lands are being alienated and they lose control over how they want their rich resources to be developed.

---

<sup>1</sup> Dr Tim Anderson [Political Economist, University of Sydney], "A Grand Deceit: The World Bank's claims of 'good governance' in Papua New Guinea", August 2003

### Smallholders Agriculture Scheme and Poverty

In this project brief, ADB appeared not to have heeded past lessons learnt or the recommendations of its own evaluation. It continued to claim that the most effective means of poverty reduction for PNG is through a broad-based economic growth model led by the private sector. And that it is crucial to kick-start the development of Nucleus Estates to a point where they will attract financing from private sector or other donors including ADB. The private sector can then provide a market for smallholder crops, improved technology and infrastructure support. And the poverty reduction objective can be achieved through spin-off benefits for the rural poor by commercial enterprises enabling smallholder agricultural development.

ADB's approach has raised concern amongst civil society groups in PNG. They have been alarmed by growers' grievances and complaints as well as environmental and social impacts from similar scheme.

NE project are not new. There have been many case studies, particularly in Africa and Indonesia which have demonstrated problems and its failure to address poverty. In Ghana it was found that "contracting may provide opportunities for

maximising the financial and developmental interests of the state, of international capital, and of some peasants, but it can also become an arena for conflict between the state and international capital on one side and smallholders on the other.... and contract enforcement provisions are uneven and tend to be biased in favour of the crop companies".<sup>1</sup>

Another study in Africa showed that "the scheme has changed labour relations in the region. Labour contracting has become dominant and has similarities to piece-rate work typical of factory labour."<sup>2</sup> Such a scheme has long been associated with large-scale oil palm development. A study in Indonesia associated the growth in palm oil production with an acceleration of deforestation there and found that tree crops rather than subsistence-oriented shifting cultivation play a major role in deforestation in Indonesia. It is of great concern that ADB has identified oil palm as the most commercially viable and successful crop for the nucleus smallholder estates model for PNG<sup>3</sup>.

Construction of cash crop industry and enterprises whether in the form of conventional plantation or smallholders schemes which focus on a 'nucleus' (a private and/or foreign company) as suggested by this ADB project tie small farmers into an

unequal system. Once in this system, farmers find themselves trapped especially when the price of the commodity declines further and the income from their crops is hardly sufficient to sustain a living.

---

1 Daddieh, C.K. 'Contract Farming an Palm Oil Production in Cote d'Ivoire and Ghana' in Little, P.D. and Watts. M.J. (eds) *Living Under Contract : Contract Farming and Agrarian transformation in Sub-Saharan Africa* University of Wisconsin Press: Wisconsin. 1994

2 Peter D. Little. 1994. *Contract Farming and the Development Question*. In P.D. Little and M. J. Watts (eds) *Living under Contract: Contract farming and Agrarian Transformation in Sub-Saharan Africa*, University of Wisconsin Press: Wisconsin pp 216-248

3 ADB report and recommendation of the President to the Board of Directors, on a proposed Technical Assistance loan to Papua New Guinea for Nucleus Agro-Enterprises, November 2001

### **Undelivered Promises of Oil Palm Smallholder Scheme**

Oil palm has been singled out by the ADB as the most successful crop for NE model in PNG. When oil-palm estates expanded throughout PNG, growers and leaseholders became engaged in oil palm schemes on promises of great returns. However, in many cases the profits failed to materialize and growers and leaseholders in other oil palm schemes began voicing their discontent. They were angry that promises made decades ago to lure them into such scheme have not delivered the de-

sired development outcomes. They felt enslaved by the scheme.

In a typical NE arrangement, growers provide labor and shoulder all the costs of land clearing and all stages of the palm plantation establishment, including regular maintenance and harvesting. The risk is on the growers as their return is heavily dependent on the world price level for the commodity concerned and the productivity of their plots. Growers enter into a contractual agreement with the company so the relationship is sealed for a long time. Furthermore, growers would have already allocated their best farmland to or cleared their pristine forests for the scheme, making it almost impossible to return to subsistence farming. This contractual agreement creates a monopoly since the company is the only market available to buy the produce, giving the company a lot of power to set price and conditions.

Landowners and smallholders in existing oil palm project areas are unhappy with the low return from their labour and once productive land. Many growers complained that big promises were made to coerce them into accepting oil palm as a good development project just to find themselves trapped in a situation of total dependency on the oil palm company and commodity price fluctuations.

### Case 1 - Mosa Local Level Government area (LLG) in West New Britain Province.<sup>1</sup>

**H**ere, eight ward councils cover over 3,500 Agricultural Land Settlement Scheme Block Holders with a population of over 48,500 inhabitants. Mosa is one of the most populous and active LLG Councils in West New Britain Province. These blocks of land were leased out to the public by the Government who had acquired the land from the customary land-owners for agricultural development purposes for 99 years. The lands were subsequently developed into oil palm blocks which in consequence became the main economic activity for Mosa LLG.

West New Britain has been hailed as a success story for NE scheme and yet at Mosa LLG, the pressure of reduced oil palm prices has forced many of these block holders to raise chickens as an alternative source of income alongside other minor agricultural activities including vegetable gardening and animal husbandry. The situation was so desperate that day old chicks had to be purchased and airlifted to supply poultry farmers in the area. High mortalities of the chicks were encountered during the shipments and farmers had to bear the high cost of airfreight.

Here a monthly income from a 4 hectare oil palm block is around PGK1,800. With two to three generations of household family members living off this income, it is not enough to provide for all their basic needs. With promises of development, people were lured to the area resulting in a significant over-crowding situation on the blocks. Some families cannot even afford basic items such as soap and medicines and are cash-strapped to pay for school fees and uniforms. Women experience the most significant aspect of poverty when they say that they feel "boxed in" by resettling in an oil palm block and now have nowhere to go but to keep on picking the fruit. They are unable to even afford the cost of travel to go home.

Youth unemployment is a serious concern for these block holders. Youths are most at risk of law and order problems in the over crowded oil palm blocks. Abuse of drugs and alcohol from cash income only help to trigger these problems.

---

<sup>1</sup> Mosa Poultry Hatchery Rapid Rural Appraisal Report, Nucleus Agro-Enterprises Project, 2004

In Oro Province, the World Bank-funded oil palm project allocated 30 percent of the farm gate price to paying the World Bank loan so growers get K\$130 (USD\$35) per ton of their harvests in times of good world price. But this can quickly plummet if world supply increases or if there is a low demand due to economic recessions in palm oil consuming countries or when the price of soy oil, its main competitor, decreases.

That this concern is very real, as

illustrated by the Malaysian experience. The average price of palm oil rose from RM1,358 (USD\$350) a tonne in 1997 to RM2,378 (USD\$530) in 1998, providing a bonanza to the smallholders. The price level began to decline in 1999 (averaging RM1,459 or USD\$360), and this trend continued in 2000. By 2001, prices were at a 15-year low - the average crude palm oil price for January was RM699 (USD\$150), a drop of 71 percent compared with the average price of 1998!

### Case 2 - Milne Bay Province

Village Oil Palm scheme producers in Milne Bay average PGK\$1000 (USD\$250) per annum per hectare from harvesting oil palm. Compare this with the net profit from one grown tree of K\$1,050 (USD\$260) where an average 3 cubic meter worth of rough sawn timber can be obtained. When the value of non-timber products is added to the worth of the 1-hectare forests, the opportunity costs of the area are far beyond what oil palm can offer to landowners and many of the alternatives are far more ecologically sustainable and socially more viable. In the same province landowners are offered rent in a lease-lease-back arrangement of a mere K\$20 (USD\$5) per annum per hectare. When the oil palm is no longer productive, landowners will be left with a degraded wasteland unsuitable for agriculture.

### Undermining of Customary Land Tenure System

Plantation projects, whether they are of the conventional large-scale type or nucleus smallholder plots, effectively changed the relationship between people and their land. Lands

are communally owned and shared within and between clans in PNG. Once the land is converted into cash crop plantation plots by a particular family or families within a clan, this relationship and 'ownership' is permanently changed. This is a major concern for most landowners.

Furthermore, fertile lands, which once formed the basis of subsistence for Papua New Guineans, will become degraded through monoculture projects.

This makes it more likely that at the end of the monoculture lease, landowners will be compelled to turn their customary lands into private or state ownership for other commercial exploits for small monetary payment. Civil society is concerned that oil palm and other large-scale agriculture projects are just another way for the IFIs and powerful donors to achieve their goal of 'land mobilisation'.

Land mobilisation involves creating a centrally controlled registration of land ownership and determination of boundary of customary lands. This will effectively give the national government the power to decide on land ownership and distribution, further eroding customary system which has already been in place for over 50,000 years. This change is likely to facilitate easier transfer of the customary land tenure system to freehold, leasehold or to state ownership to enable easier private sector access to PNG's rich and abundant natural resources.

Customary land tenure in PNG has been blamed by many donors and businesses for holding back de-

velopment because it is a complex exercise to get communal permission to free land under the current system. Under the current system consent from landowners is required before any activities can take place.

However, corruption and the almost complete breakdown of governance have aided unscrupulous businesses in continuing to ignore this legal requirement. Uninformed landowners continue to be cheated, coerced or forced into raw deals. Civil society fears that entrusting land registration and boundary determination to the Government is effectively letting the 'lions take care of the lambs'.

Despite these concerns, the World Bank, backed and supported by many powerful donors, including the Australian Government, provided a loan in the mid 90s for a 'Land Mobilisation' project. Protest actions and widespread public outcry eventually stalled the project. The ADB is not far behind in helping analyse options to 'address' land tenure systems. ADB vows to provide TA to review the sensitive issue of land tenure in 2004. Hence civil society groups believe that this agenda returning in a more subtle and disguised form in the name of development and economic growth for PNG.

## Social Implications

Like many large-scale projects in the guise of development, the introduction of agro-enterprises in PNG also brought many complex and costly social problems once unknown to rural PNG. The change that comes with this kind of externally imposed project is often disruptive and it undermines the existing customary system and structure which has sustained local communities as long as they remember. Some of the issues identified are :

- Often not everyone in the community is in agreement with the agriculture project. Sometimes, customary land boundaries are crossed to establish the crops. At other times, the parent company leases out lands to people from other areas for their agriculture plots resulting in communal tension and misunderstandings.

This manipulation of land use and transfer of tenure is not based on customary process and often results in discontent and anger within the community and between communities. Conflicts from land disputes are on the increase as these kind of schemes are introduced. Downstream communities often bear the brunt of waterway pollution which is another source of communal conflicts.

- The transition from subsistence to cargo or cash-dependency has both social and economic ramifications. It is unfair and patronizing to classify rural PNGeans as 'rural poor' as they have access to abundance of resources as long as their land remains intact and the natural environment healthy. The natural environment forms the basis of their subsistence and strong cultures and it social safety net through the wontok system<sup>1</sup>.

However, agriculture projects as proposed by the ADB drastically undermine this strong system as these projects often require major cultural shifts and restructuring of community activities and relationships. Growers essentially lose control of their lifestyle once they become bound to a long contractual arrangement with the parent company of NE.

- Rise in drug and alcohol abuse. Money from cash crops production increases the purchasing power of growers. Often men are the key recipients of money from the produce even though the entire family may have been involved in the whole production cycle. Unfortunately, alcohol is one of the most popular items purchased by men in places with smallholder scheme.

- Rise in crime rate – following are some of the reported cases associ-

ated with the West New Britain oil palm scheme :

- 67-year-old from Maprik in East Sepik jailed for seven year for breach of trust and for indecent assault of a 13 year old girl at Kapiura oil palm estate
- an oil palm settler at Bavussi in Hoskins jailed for attempted rape of a 12 year old girl
- warrants issued for 4 men who failed to appear on charges of rape and carnal knowledge of a young girl at Laleki oil palm settlement in Kimbe

---

<sup>1</sup> System of caring and sharing in PNG. Under this system, no one will be left to starve or without a shelter as it is the obligation and responsibility of family and friends to take care of the person/s in need.

### **Erosion of Cultures, Restructuring Community, Undermining of Securities**

The majority of rural communities in PNG are by no means poor. With the exception of areas degraded or polluted by large mines, agriculture or fishery projects, the customary land

tenure system has enabled local communities to have free and easy access to land, clean water and an abundance of natural resources for a decent quality of life. They have control over their natural resources and they are in control of their lives and their daily activities. Their sense of security is guaranteed through a strong communal support system. This "*subsistence affluence*"<sup>1</sup> lifestyle is the envy of many of the world's impoverished communities and is increasingly aspired to by some in the industrialised west.

Villagers often wish for better health care and access to education as well as roads and transportation infrastructure to expand their market of their own produce. They are weary of large-scale projects that often create poverty through environmental destruction and displacement, which threaten food security and subsequently bring about adverse social impacts.

---

<sup>1</sup> Julie-Anne Ellis, Sustainable Livelihoods, Paper prepared for the UNDP PNG Human Development Report 2000

## Activities Taken by Affected People and NGOs

This project first came to the attention of civil society groups when GOPNG in 2002 made public announcements that the ADB feasibility study would facilitate massive expansion of oil palm projects throughout the country. Senior bureaucrats and politicians including the Prime Minister Michael Somare described the oil palm industry as "a silent achiever ... now the leading vibrant, dynamic industry with reputable status in the country, because of its professional managers, and board of directors, who have the vision for the industry for the nation, and to make it the biggest ever industry for the country in the 21<sup>st</sup> century." Somare has recently declared tax breaks for companies interested in developing the oil palm industry in PNG. Government officials have announced plans for expansion of oil palm plantations in nearly every province in PNG. This has cre-

ated fear amongst informed landowners.

In response to this announcement, landowners in the Madang Province got themselves organised and publicly announced their opposition against oil palm projects in their lands – see Attachment C. This opposition was widely supported. At the last election a large majority of the local level government representatives voted into office in the oil palm targeted area were anti-oil palm. Landowners and their elected representatives vowed to fight any oil palm plan from the national or the provincial governments.

Similar action has been taken by the Oro growers in relation to oil palm – see Appendix 1 for their declaration. Lately, we received news that landowners from the Sepik area have also expressed their opposition to this kind of expansion.

---

## Project Monitoring

# Review of Project Against ADB Environmental Provision

This monitoring exercise is based on a desk review of the various project documents made available by the ADB and TASMU as of May 2003. A more thorough monitoring exercise at this stage is not possible until issues identified below are clarified with the relevant ADB and/or TASMU staff. Due to the long delay in project start-up, the scheduled two-year project has just completed its first quarter of implementation. Selection of sub projects and pilot projects has recently completed so this analysis is based on one of out the total of four key activities to be undertaken by TASMU. No field monitoring of any of the selected projects has been carried out.

The focus on feasibility studies and piloting of projects of the Nucleus Smallholders Agro Enterprises Project offers a lot of scope for the ADB to implement its environmental guidelines and policy. In the Report and Recommendation of the President to the Board of Directors on a Proposed Technical Assistance Loan to Papua New Guinea for Nucleus Agro-Enterprises in Novem-

ber 2001, specific assurances in relation to the environment were given by GOPNG.

These assurances which have been incorporated into the Loan Agreement were:

(i) The Government, through DNPM<sup>1</sup> (Department of National Planning and Monitoring) and TASMU, will ensure that (a) environmental concerns are fully taken into account from the time of the formulation of selection criteria to the completion of the subproject feasibility studies; (b) opportunities exist to maximize potential environmental benefits and minimize environmental conflicts and costs; and (c) any investment proposal resulting from a subproject feasibility study is tested on the basis of environmental parameters as well as technical and financial parameters.

(ii) All environmental mitigation measures identified as the result of a subproject feasibility study or pilot project investment plan will be incorporated into the project design and

followed during project construction, operation, and maintenance in consultation with the Government's Office of Environment and Conservation and in accordance with ADB's environmental guidelines.

These agreements were also reflected in the Environmental Considerations of the Loan Covenant (Loan No. 1889-PNG: Nucleus Agro-Enterprises) under Schedule 6 Para 9 (a) and (b) Specifically it stipulated that:

The Borrower (GOPNG) shall ensure that TASMU and the Screening Committee ensure that in evaluating and/or funding any Subproject in which environmental considerations are involved (including resettlement, gender and other social dimensions),

(i) Environmental concerns are fully taken into account from time to time of the formulation of detailed selection criteria to the completion of the SFS;

(ii) Opportunities exist to maximise potential environmental benefits and minimise environmental conflicts and costs; and

(iii) Any investment proposals resulting from a SFS is tested on the basis of environmental parameters as well as technical and financial parameters.

In the January Inception Report, TASMU stated that "Particular emphasis will be placed on the social and environmental impact as well as assessing the economic and financial viability of the sub-project and provide assistance with marketing strategies."

While these assurances and emphasis might have offered some initial comfort, much remained to be seen through the monitoring exercise.

---

<sup>1</sup> This department has subsequently undergone a name change into the Department of National Planning and Rural Development (DNPRD).

### **ADB Environmental Guidelines**

In the loan document, ADB claims that it is formally committed to following its environmental policies including the Environmental Assessment Requirements and Environmental Review Procedures of ADB. From the first Inception Report reviewed, it was evident that this requirement was conveyed to the executing agent, TASMU and GOPNG. How this translates into practice in the field remain to be seen.

Since this project was approved in December 2001, it was initially assumed that provisions under the ADB

Environmental Considerations in Bank Operations, OM Section 21, February 1998 would be applicable. Upon retrospective analysis of the project Inception Reports, references were made to the new policy but how it has been applied in practice also remains to be assessed.

In an Inception Report written by the former project officer Daniele Ponzi dated 26<sup>th</sup> August 2002, the Loan Inception Mission called to the attention of the DNPRD and TASMU the new ADB Environment Policy and the new Environmental Assessment Guidelines. The Mission was very specific and prescriptive in so far as the environmental impact assessment is concerned. It stipulated that :

- TASMU apply the new environmental categorisation system including the use of the Rapid Environmental Assessment (REA) Checklists for Agro Industries, Fisheries, Forestry, Watershed Development & Irrigation. These RDE checklists should be used by TASMU during the preliminary rapid appraisals of proposals of project proposals, taking into account type, size and location of the proposed project to determine its environmental category and prepare the preliminary social and environmental assessment.

- After concurrence from ADB in relation to the above process, TASMU will prepare, if required, the terms of reference for the EIA (for project classified as category A) or IEE (for Category B) to be carried out during the feasibility studies or prior to disbursements of funds for pilot activities.

- Further reference was made to the requirements of the new environmental assessment guidelines in terms of Environmental Management and Monitoring Plans, Public Consultations, Social Dimensions and the use of the sector guidelines (Agriculture and Natural Resources).

These processes and requirements were clearly spelt out in the Project MOU between the ADB and the DNPRD, the executing agent for the project. ADB representative Daniele Ponzi explained the above procedures and handed over to TASMU one copy each of the Environment Policy and Environmental Assessment Guidelines draft documents.

In December 2003, an e-mail correspondence with Mr. Ponzi suggested a slight variation. He informed that in his last mission to PNG before his promotion to another section of the ADB, the following were discussed:

"The Mission called the attention of the TASMU team and in particular the team leader and the co-head on the required environmental and social assessments both for RRAs (Rapid Rural Appraisals) carried out by TASMU and SFSs (Subproject Feasibility Studies) undertaken by the subproject consultants. Key ADB policies and guidelines and related documentation in the form of a CD-ROM were given to TASMU co-head for duplication and distribution to all TASMU staff. The CD included, among others, the new ADB environment policy, the new environmental assessment guidelines, environmental checklists, EIA and IEE formats, involuntary resettlement and indigenous people policies and plans' formats".

Clearly, Environmental Considerations in Bank Operations, OM 20, February 2003 is the policy to be followed for this project. This Guideline was included as Appendix 7 of the January (& final) Inception Report but little procedural information based on this guideline was found in the report. At the time of writing of this report, Appendices of the January Inception Report were not available.

A latter e-mail (following from Ponzi's response in December

2003) to the TASMU team requesting their environmental checklists for the environmental categorisation system had not yielded any specific response beyond their forwarding of the Inception Reports and more recently the first quarter interim report. No reference in relation to these checklists or categorisation was found in any of the reports which detail the various tasks, steps and process undertaken by TASMU including the RRAs and the forthcoming SFSs.

After careful review of the existing reports (i.e. the January Inception Report and the March First Quarter Interim Report), it remains unclear if TASMU has adhered to the guidelines provided above.

#### **Issues Related to the Application of the ADB Environmental Guideline**

Appendices 8 to 11 associated with the January Inception report should be obtained from TASMU to better understand and more thoroughly review the methodology used in these appraisals. This has not been possible at the time of this report being written, up. An independent review by a qualified environmental impact assessor of project reports related to environmental issues and a field assessment of the

sites involved would greatly assist in this analysis. Without site visit, it was impossible to verify the assertions and conclusions drawn. It is hoped that selected site visit will be carried out within the limitation of resources available.

The following are some issues identified to date:

- In accordance with the 2003 guideline, (para 4) ADB's environmental assessment process starts as soon as potential projects for ADB funding are identified. Environmental assessment is ideally carried out simultaneously with the pre-feasibility and feasibility studies of the project. In this project, some information related to the environment is captured in the RFA of the first batch of the potential projects but they are mostly very brief and have not included many of the components outlined in the guideline.
- It appears that the REA checklists have not been used contrary to the provision in the MOU. Relevant RDE checklists should have been used to categorise each of the projects selected during the preliminary rapid appraisal process under the new ADB policy.
- It appears that IEE was carried out in the RRA process which suggests

that TASMU might have assumed that all potential projects fall into Category B without actually following through the REA process for categorisation. However, the components of the IEE were different from those specified in the ADB guideline.

- Only 1 out of the 6 projects which have been through the RRA process had been categorised in environmental categories. However, the categorisation is based on that of the PNG Government and it is not the same as that specified in the ADB environmental guideline.

The ADB guidelines stipulate that it is the borrower's responsibility to carry out the EA. And this was reflected in the Loan Agreement as described in an earlier section. However corruption and general governance failures<sup>1</sup> within GOPNG as well as the capacity limitation of the Department of Environment and Conservation mean that this is a highly unrealistic expectation.

---

<sup>1</sup> For example, when the first tranche of USD\$500,000 was transferred to the account set up for this project, funds were drawn by GOPNG for expenditure outside of this project. One of the reasons for the delay was TASMU was unable to access funds for its activities – see 1st Quarterly report of TASMU 5th April 2004.

## Project Environmental Assessment Procedures

For this project, it appears that the **initial screening** of the projects submitted involved the following :

“Environmental Concerns - Of major concern must be the effects of the proposed project on critical environmental areas or negative impacts that would need major mitigation measures. There may possibly be specific sites which can be identified from the proposal, which may within the project area or in adjacent areas where special environmental measures may need to be taken into account.

It will also be essential to consider the environmental impact of any processing facilities and whether these will create any additional need for environmental protection. **Projects that will have a detrimental environmental impact, and especially those that are only marginally economically or financially viable, should always be rejected.** There are existing ADB and Department of Environment and Conservation (DEC) guidelines for conducting Initial Environmental Examinations (IEEs) and Environmental Impact Assessments (EIAs). An IEE and in some cases an EIA will be required for each sub-project. Model TORs will be devel-

oped for this purpose. IEE should follow a standardised format that should be approved by the Steering Committee so that every project is given equal weighting in terms of the scope and extent of environmental impact<sup>1</sup>.”

This suggests that the final determining factors are economical and financial viability and not environmental concerns. This is a very weak environmental provision which does not protect fragile areas from destructive practices. And it assumes that all environmental concerns can be mitigated, especially if the financial return is high.

Amongst the risk factors identified are potential risks relate to endangering fragile areas and increased use of agro-chemicals with the associated risks of pollution of traditional water sources. It is unclear at this stage how these risk factors will be dealt with by TASMU and this remains a key concern for on-going monitoring.

Box 2 illustrates the environmental assessment inventory checklist for RRA for each sub-project selected.

---

1 Appendix 7 contains a description of the new Environmental Guidelines

## Box 2: Inventory of Issues Addressed during the RRAs for each Sub-Project - Environment, Agriculture and Engineering

### Environment

Analyse the proposed Sub-Project/Pilot Project to provide a preliminary assessment of whether it would impinge upon critical environmental areas or would have negative environmental impacts that would need major mitigation measures.

Determine step-by-step activities involved in implementation of the proposed Sub-Project/Pilot Project to identify possible environmental concerns.

Undertake field surveys in and around the Sub-Project/Pilot Project area to identify critical sites where special environmental measures may need to be taken during implementation and operation (for example critical water bodies or areas of primary forest).

Prepare the TOR for the environmental impact evaluation and prepare the monitoring guidelines for use during the feasibility study of the proposed Sub-Project as per guidelines provided (following the Guidelines on IEE/EIA ADB's format as presented in "Environmental Guidelines for Selected Agricultural and Natural Resources Development Projects" and "Environmental Assessment Requirements and Environmental Review Procedures of the ADB").

Assess institutional arrangements to ensure environmental sustainability, and effective enforcement of environmental regulatory guidelines and codes of practices.

**Sub-project Feasibility Studies** – For projects with significant potential social and environmental impacts detected during the RRAs conducted by the TASMU team there will be a need for more field work. The responsibility for these Missions will rest largely with the Social Impact Assessment Specialist and the Environmental Specialist. In the case of such sub-projects these Missions will provide an opportunity for the TASMU to gather additional information to ensure that a sound investment package can be prepared.

The Inception Report contains details of the checklists of information that were collected during the RRAs in respect of Environment and

Social Impacts, as well as Agriculture and Infrastructure. A further elaboration of the guidelines for Environment and Social Impact as a result of the RRAs has been defined and was reflected initially in the Table of Contents for the RRA reports. More detailed guidelines for each aspect of the RRAs are under consideration and will be refined based upon the experience of the first batch of RRAs. The same process is taking place for the Agriculture and Infrastructure assessments so that the experience gained from the first batch of RRAs can be incorporated.<sup>1</sup>

<sup>1</sup> 1st QUARTER 2004 ACCOMPLISHMENTS of TASMU

## Other Environmental Issues Identified

Following are references related to the environment found in the January Inception Report. Concerns around these references are outlined below :

- "One of the important opportunities for Papua New Guinea is to promote its agricultural products as organic since there is relatively little use of chemical pesticides. Significant opportunities may exist for niche marketing of such products particularly in Europe, but it will require the business acumen of a commercial enterprise to seek out these opportunities and target them in the course of its marketing promotion activities."

While this is a welcome statement, the project is not about promoting and facilitating organic produce. So far, only one project selected is committed to organic farming practices. The rest of the projects are mostly monoculture cash crops or animal farming proposals which require the use of farm chemicals and/or will cause some level of pollution or environmental damage.

In some cases, this project may lead to pristine rainforest to be cleared for the planting of the crops.

- Although ADB has assured concerned NGOs that oil palm will not be the focus of this project, it has not been ruled out completely. In fact two of the projects selected for RRA were oil palm projects. These will have to be monitored closely as oil palm estates in PNG already had a long track record of negative environmental and social impacts.

Environmental concerns in PNG were mentioned in a number of ADB country strategy and country program papers, although, support was limited to TA for institutional strengthening and the suggestion that environmental issues would be integrated in the operational program.<sup>1</sup>

---

<sup>1</sup> Country Assistance Program Evaluation for Papua New Guinea, October 2003

## Summary

According to the ADB, PNG's environment-related legislation is generally adequate, but could benefit from further strengthening and improvement. The Australian Government as well as other funders such as the World Bank have attempted to strengthening the institutional capacity of PNG agencies to manage resources in a sustainable manner. The Bank organised a Tropical Forestry Action Plan (TFAP) for the PNG Government in 1989 (World Bank 1989) and was involved in several other abortive attempts to regulate logging in the 1990s. In 1991 the Government introduced a National Forest and Conservation Action Program, and also amended the Forest Act, to introduce notions of sustainability. A logging code of practice was introduced in 1997. However, in practice, not much changed.

In its evaluation report, ADB asserted that environmental concerns were mentioned in a number of country strategy and country program papers, although, support was limited to TA for institutional strengthening and the suggestion that environmental issues would be integrated in the operational program. This completely ignored the fact that PNG's track record in ensuring environmental sustainability is abysmal, and the existing system and

structure is inadequate to protect the country's relatively intact natural environment or to ensure sustainable livelihoods of PNG's subsistence communities.

Colonisation began with the aim to exploit the rich and abundance natural resources of PNG. The present Westminster-based political system and economic structure have been primarily shaped and established by major donors such as the Australian Government enhanced through loans provided by the IFIs. This system and structure is one which is established to pursue an "export-driven" economy rather than the development ideals as set out in the PNG Constitution :

Five promises of the National Goals and Directive Principles of the Constitution:

1. Integral human development: emphasising the importance of human dignity and total individual development
2. Equality and participation: equality and dignity for all
3. National sovereignty and self-reliance: emphasising the need to keep foreign investment under strict control, and to encourage Papua New Guinean participation

4. Natural resources and environment: emphasising the need to conserve natural resources for future generations

5. Papua New Guinean ways: emphasising the promotion of custom, Papua New Guinean ways, and small scale development.

Consequently, there has been an absence of participatory democracy and the majority of the communities are completely ignorant of and alienated by the political processes which now govern the nation. The situation has resulted in a serious breakdown of governance. Former Prime Minister Sir Mekere Morauta conceded the depth of the problem:

*"I think it would be fair for me to describe corruption as both systemic and systematic; systemic because it has invaded the whole process of policy making and decision making. It has drowned the whole system, so it's systemic. It's systematic because it's organised."* (Morauta 1995)

Fiscal pressures facing the PNG Government through an inappropriate model of governance coupled with the low priority given to conservation efforts and environmental sustainability, have caused it to consistently under-fund activities

and services which it is responsible for providing. Morale is low within the Department of Environment and Conservation (DEC). Staffs are often under resourced and ill equipped to carry out environmental assessment of large project. Very often, DEC is not involved in decision-making and assessment of project's environmental impact. Given this situation, it is totally unrealistic to expect that the Government is able to fulfil its responsibility as a regulator and a service provider. The ADB has failed in its duty of care as a development bank to proceed with this TA loan with the assumption that GOPNG will fulfilled its obligation as the Borrower to adhere to the loan agreement and conditions.

### The Way Forward

Purely concentrating upon the PNG Government or the ADB Environmental Policy and guidelines is to ignore the realities of PNG's land tenure system, and major lessons learned by integrated conservation and development projects in PNG in participatory land use planning over the past decade.

One major factor that distinguishes PNG from many other 'developing' countries is the high percentage of land which is politically controlled not by the State but by

customary landowners. Poor political will at national and provincial levels certainly hampers conservation efforts, and much more could be achieved through improved Governance. However, since power to determine the fate of biodiversity rests largely at the resource owner community level, it is at this level that the will for conservation and sustainability needs continual assessment.

Local communities often see conservation and development as mutually exclusive activities. Perceiving themselves to be isolated from the development stakes, (for a want of experience and understanding of the workings of the economy and owing to structural handicaps, including the death of economic structure), communities are committing their forest resources to extractive uses in return for the payment of a resource rent. Using their land, forestry and mineral resources as leverage, communities are demanding the delivery of development benefits from outsiders.

PNG's forest communities have little understanding of resource scarcity. Papua New Guinean's have historically been accustomed to being controlled by the natural environment, and the concept that they can extirpate forest resources is difficult for them to accept. As is true

elsewhere, many PNG communities take a short-term world view, concerned with immediate welfare rather than longer term well being. In this regard, greater awareness raising through lessons learnt elsewhere is urgently needed.

Decision making at the local level is being increasingly distorted by the establishment of patron-client relationships between community power brokers and resource extracting companies. These relationships, which to communities are construed as an engagement in social relations, require reciprocity and serve to promote the company's interests over ecological and social needs.

The State has become increasingly dependent on moneys from logging, mining and cash-crop agriculture ventures to meet expenditure needs. Given that political time horizons are notoriously short in PNG, There has been a policy emphasis on maximizing short-term returns rather than taking a longer-term view. The emphasis has been on maximizing the area under resource extraction in order to meet immediate treasury needs. Environmental sustainability and conservation policies or programs are accorded a very low political priority. The Department of Environment and Conservation is politically disempowered.

A point that should be emphasized in this regard is that PNG's biodiversity endowment, given its uniqueness, is simply too valuable to neglect. Furthermore, this endowment is the basis of subsistence economy for over 80% of PNG's population. The challenge is to find, within the constraints posed by the social, economic and political landscape, policies and strategies that work. Civil society groups in PNG have begun to face this challenge.

One fine example is the Madang-based Bismarck Ramu Group (BRG).

They have achieved phenomenal outcomes both in conservation and in contributing to self-reliance through empowerment in communities they work with. BRG is widely recognised by many NGOs and development practitioners to have developed a best-practice approach to conservation and development. BRG as an organisation is structured to suit the Melanesian way of life. It provides flexibility of work contract for its staff but it requires that all staff adhere to a strong set of work ethics and code of conduct.

The latter were developed through time by the BRG team collectively. Most decisions are made collectively through consensus. It

approaches development by utilising the strength of Melanesian cultures whilst taking careful steps to minimise the risk of creating a dependency by the community. BRG especially value the Melanesians' strong connection to the land and the natural environment. And it is on these bases that BRG works with local communities to determine their own development direction and activities that are truly Melanesian and ecologically sustainable.

Other groups actively engaging with local communities to bring about environmental justice are the Centre for Environmental Law and Community Rights (CELCOR), Environmental Law Centre, Alotau Environment Ltd as well as the PNG Eco-Forestry Forum. These organisations are wholly PNGean run and are set up to explore a truly Melanesian way to facilitate their own development path and to promote the Constitutional ideals and principles.

In addition, UNDP/DEC's Biodiversity Conservation and Resource Management Programme has made some significant contribution in terms of better defining the PNG landscape, and pointing to possible solutions. (see [ww3.datec.com.pg/crc/default](http://ww3.datec.com.pg/crc/default)).

ANNEXURE

# NO OIL PALM

We the landowners of:

Koropa	Usino
Sausi	Caraligut
Yakumbu	Bill 1
Urigina	Bill 2
Danaru	Sepu

Located in the proposed Oil Palm area in the Upper Ramu district in Madang Province wish to make it perfectly clear that there will be **NO OIL PALM** project on OUR LANDS!

We have made our position clear from the very beginning that we do not want or need oil palm in our area.

The proposed Oil Palm project is an agreement by the National Government, Provincial Government, Ramu Sugar Company and Overseas Investors and **DOES NOT INCLUDE THE LANDOWNERS!**

Only after an agreement had been reached by the above parties did they bother to inform us landowners. We have objected time and time again.

In addition our Local Level Government (LLG) with the support of local officials have continually informed the Provincial Authorities that they **DO NOT and WILL NOT SUPPORT OIL PALM** in their area.

We, the landowners are developing and will continue to develop OUR LAND on our terms.

We therefore sternly warn all those parties involved in wanting to use OUR LAND for oil palm to **STAY OUT!** Any attempts to bring oil palm on our land will be strongly resisted.

Lastly we wish to inform all parties trying to force oil palm on us that in addition to resisting you in situ, we are prepared to take legal action.

**YOU HAVE BEEN WARNED!!!**

Bom Onot (Sausi)	Koflor Genembia (Urigina)
Masai Kensa (Sausi)	Tamonifa Simandup (Urigina)
Agus Lupia (Koropa)	Pori Tamuel (Urigina)
Naman Topo (Yakumbu)	Win Maraul (Danaru)
Taraya Gidimapi (Yakumbu)	Kasi Maraul (Danaru)
Milap Bagipa (Yakumbu)	Set Win (Danaru)
Simon Tiloni (Usiano)	Pais Begap (Usino)
Masani Setif (Usiano)	Simon Awaiva (Sepu)
Michael Kamsi (Usiano)	Toby Jangape (Sepu)
Biyul Kapiak (Bulu)	Moses Soba (Caraligut)

---

## Endnotes

- 1 Country Assistance Program Evaluation for Papua New Guinea, October 2003
- 2 Ponzi, Daniele (2002) Letter to the Australian Conservation Foundation, 5 August [Daniele was an Environmental Economist and the Project Team Leader for the Nucleus Agro-Enterprises project with the ADB]
- 3 Dr Tim Anderson [Political Economist, University of Sydney], "A Grand Deceit: The World Bank's claims of 'good governance' in Papua New Guinea", August 2003
- 4 E-mail correspondence August 2002 & face-to-face meeting with senior Project Staff, June 2003
- 5 "Oil Palm, the best alternative" by Ekonia Peni The Independent newspaper, July 2002
- 6 Country Assistance Program Evaluation for Papua New Guinea, October 2003
- 7 "Land, Labour and Independent Development", Chapter 5, The Cambridge History of the Pacific Islanders, Cambridge University Press, Cambridge, 1995
- 8 Asian Development Bank Papua New Guinea Country Strategy and Program Update (2003 – 2005), July 2002
- 9 Asian Development Bank Papua New Guinea Country Strategy and Program Update (2003 – 2005), July 2002
- 10 Country Assistance Program Evaluation for Papua New Guinea, October 2003
- 11 Inception Report of the Nucleus Agro-Enterprises , (ADB LOAN No. 1889 - PNG) by the Technical Screening and Management Unit, Port Moresby 22nd January 2004
- 12 Country Assistance Program Evaluation for Papua New Guinea, October 2003
- 13 Dr Tim Anderson [Political Economist, University of Sydney], "A Grand Deceit: The World Bank's claims of 'good governance' in Papua New Guinea", August 2003
- 14 Daddieh, C.K. 'Contract Farming an Palm Oil Production in Cote d'Ivoire and Ghana' in Little, P.D. and Watts. M.J. (eds) Living Under Contract : Contract Farming and Agrarian transformation in Sub-Saharan Africa University of Wisconsin Press: Wisconsin. 1994
- 15 Peter D. Little. 1994. Contract Farming and the Development Question. In P.D. Little and M. J. Watts (eds) Living under Contract: Contract farming and Agrarian Transformation in Sub-Saharan Africa, University of Wisconsin Press: Wisconsin pp 216-248
- 16 ADB report and recommendation of the President to the Board of Directors, on a proposed Technical Assistance loan to Papua New Guinea for Nucleus Agro-Enterprises, November 2001
- 17 Mosa Poultry Hatchery Rapid Rural Appraisal Report, Nucleus Agro-Enterprises Project, 2004
- 18 Julie-Anne Ellis, Sustainable Livelihoods, Paper prepared for the UNDP PNG Human Development Report 2000
- 19 1st QUARTER 2004 ACCOMPLISHMENTS of TASMU
- 20 Country Assistance Program Evaluation for Papua New Guinea, October 2003
- 21 Michael Parsons & Julie-Ann Ellis, Comment on AusAID Papua New Guinea Country Strategy Paper, South Australia, 1 May 1999